REMARKS

Drawings

Applicant would like to thank Examiner for his thorough review of the patent application.

In Paragraph 2 of the Detailed Action, the Examiner states that a legend designated as "Prior Art" in Figures 1a-1e is required. Applicant respectfully submits a proposed correction having the "Prior Art" legend in the corrected drawing sheet for FIG. 1a through FIG. 1e.

In Paragraph 3, the Examiner has requested a proposed drawing correction for the reference signs 29a and 29b in FIG. 1d. Applicant respectfully submits a proposed correction identifying the reference numbers 29a and 29b in the corrected drawing sheet for FIG. 1d.

In Paragraph 4, the Examiner has objected to the following reference sign(s) because they are not mentioned in the description: "32" (FIG. 1e), "262" (FIG. 5), "358" (FIG. 6C), and "480" (FIG. 9). To overcome the Examiner's objections the Applicant respectfully submits the proposed corrections to the Specification identified above.

In Paragraph 5, the Examiner has objected to the use of the reference character 236 in FIG. 3a. To overcome the Examiner's objections the Applicant respectfully submits the proposed corrections to the Specification.

In Paragraph 6, the Examiner has objected to FIG. 2a and the instances of "4b" and demanded a changed to "2b". In responding to the Examiner's objection, FIG. 2a has been corrected and "4b" has been changed to "2b". In Paragraph 6, the Examiner has noted having difficulty seeing the 3 reference numbers in FIG. 3a due to shading. In responding to the Examiner's objection, a corrected FIG. 3a is submitted in which he shading has been removed. In Paragraph 6, the Examiner has indicated some confusion interpreting the reference numbers, namely, reference number 232, 236, and 228. The corrected drawing FIG. 3a should clarify Examiner's confusion. Corrected drawing FIG. 3a shows that reference number 228 is related to the guide tube that is located within the weld gap which is defined by the workpieces 220 and 222, and the welding shoes 224 and 226. In Paragraph 6, the Examiner has indicated that with respect to FIG. 6a and FIG. 6c, both instances of "2b" should be changed to "6b". Applicant respectfully submits

a corrected drawing with these requested changes. In Paragraph 6, the Examiner has noted that in FIG. 6c, the number "60" should be changed to "360". Applicant respectfully submits a corrected drawing with this requested change.

Specification

In Paragraph 7, the Examiner reminds Applicant of the "proper language for an abstract of the disclosure". However, no clear action has been provided to the Applicant. Applicant is not sure if the Examiner wants Applicant to submit a new Abstract. If the Examiner desires the submission of a new Abstract, please advise and Applicant would gladly submit a new Abstract.

In Paragraph 8, the Examiner notes the use of the trademark "Arcmatic" on page 18, line 16. The action requested by the Examiner is for the trademark to be capitalized. Applicant has taken the action requested.

Claims

Examiner provides claim rejection in Paragraphs 11 through 14. The Applicant wishes to thank the Examiner for the very thoughtful 103 objections. However, the Applicant contends that the Examiner has not thoroughly understood the scope of independent claims 1, 9 and 13.

As it applies to the Examiner's 103 objection, it appears that the Examiner has not fully grasped the independent claims. Each of the independent claims describe a first elongated strip with ***at least one longitudinal channel*** and a second elongated strip. There are no limitations directed to the second elongated strip having or not having ***a longitudinal channel***. The Examiner's arguments appear to assume that the second elongated strip includes a longitudinal channel. It is respectively submitted that although covered by the claims, the Examiner has ignored the species in which the second strip does not include a longitudinal channel.

The art cited by the Examiner, namely, Tanenbaum (U.S. 3,325,619) fails to teach the limitation of having ***at least one longitudinal channel***. Additionally, each of the patents cited by the Examiner, namely, Norcross (U.S. 3,558,845), McDowell (U.S. 3,939,324), and Bong et al. (U.S. 6,297,472), fail to teach the limitation of having a first elongated strip with ***at least one longitudinal channel*** and a second elongated strip without a longitudinal channel.

Applicant contends that a guide tube having a first elongated strip with ***at least one longitudinal channel***, a second elongated strip, and a plurality of insulator modules in the back of the elongated strips would not have been obvious in the prior art, since the prior art referenced by the Examiner does not teach this combination.

Additionally, Tanenbaum (U.S. 3,325,619) is directed to a guide tube having a circular cross-section. The present patent application teaches the existence of metal strips that have more of a "rectangular" cross-section. This "rectangular" cross-section provides the benefit of permitting the guide tube to communicate an electrical field to all four corners of the weld puddle. Generally, all weld cavities are a rectangular cavity as shown in FIG. 3a, FIG. 3b and FIG. 3c. A guide tube such as the Tanenbaum '619 guide tube does not operate as effectively as a "rectangular" guide tube because it has a circular cross-section and the weld puddle is rectangular in nature.

Therefore, the Applicant requests additional proof from the Examiner of a teaching that would show a first elongated strip with ***at least one longitudinal channel*** and a second elongated strip and a plurality of insulator modules resulting in a substantially rectangular guide tube.

Should the Examiner be unable to find an applicable reference for the independent claims discussed, then the Applicant contends that the application and the remaining claims are now in a condition for allowance.

Sincerely,

Michael A. Kerr
Reg. No. 42,722

Dated: September 27, 2002
VIRTUAL LEGAL
777 E. William St., Ste. 211
Carson City, NV 89701
Telephone: (775) 841-3388
Facsimile: (775) 841-3389